



MIAMI-SOUTH FLORIDA

National Weather Service

Forecast Office

<http://www.weather.gov/miami>

RETURN TO NORMAL RAINFALL IN JULY

RECORD HOTTEST JULY IN WEST PALM BEACH

After a prolonged dry spell spanning the last 3 months of 2010 and most of 2011, July rainfall amounts were mostly near to slightly above the monthly averages. Total rainfall amounts ranged from over 10 inches over portions of the Everglades in Collier, Hendry and Glades counties to about 4 to 5 inches over parts of the southeast Florida metro area. This correlates to above average monthly rainfall for most inland and southwest Florida locations, with near to slightly below normal rainfall over southeast Florida (Figure 1).

Widespread heavy precipitation affected the southern Florida peninsula on July 6 and 7 from a tropical wave which moved through the region. Otherwise, July rainfall came from the typical summer sea breeze cycle which favored afternoon and evening showers and thunderstorms over interior and southwest Florida and night and morning showers and thunderstorms over southeast Florida. This pattern is quite typical of an easterly wind flow regime in July. Rainfall amounts varied greatly even within the same general geographic area, an indication of the relatively random nature of sea-breeze generated rainfall. One example was the large difference in rainfall between Juno Beach and Palm Beach Gardens, two cities in northern metro Palm Beach County which observed rainfall differences of over 6 inches (see table below).

Below are July 2011 rainfall totals at select sites across South Florida. Rainfall values are listed in inches.

JULY 2011 RAINFALL TOTALS/DEPARTURE FROM NORMAL IN INCHES

Station – Beginning of Records	July 2011	Dep. fm Normal
FORT LAUDERDALE – 1912	3.87	-2.83
MIAMI – 1895	5.71	-0.08
NAPLES – 1942	6.06	-1.92
WEST PALM BEACH – 1888	6.75	+0.78

MIAMI BEACH - 1927	10.18	+6.55
MOORE HAVEN - 1918	6.96	+0.29
MUSE	5.44	
BRIGHTON RESERVATION	10.67	
HOMESTEAD GENERAL APT	6.30	
THE REDLAND - 1958	8.89	+3.14
NWS MIAMI – FIU MAIN	7.95	
IMMOKALEE	2.65	-4.62
JUNO BEACH	12.08	
NORTH MIAMI BEACH	8.59	
OASIS RANGER STATION	8.70	
PALM BEACH GARDENS	5.74	
MARCO ISLAND	4.80	
CAPE FLORIDA	5.65	
CANAL POINT - 1941	3.95	-2.27
HOLLYWOOD - 1963	5.23	-1.17
CLEWISTON	9.26	+2.68
DEVILS GARDEN	9.40	+1.88
FORT LAUDERDALE BEACH	5.96	
LOXAHATCHEE NWR	6.14	

NORMAL VALUES ARE THE 1971-2000 CLIMATIC AVERAGES, BUT ARE NOT AVAILABLE FOR ALL OBSERVING LOCATIONS.

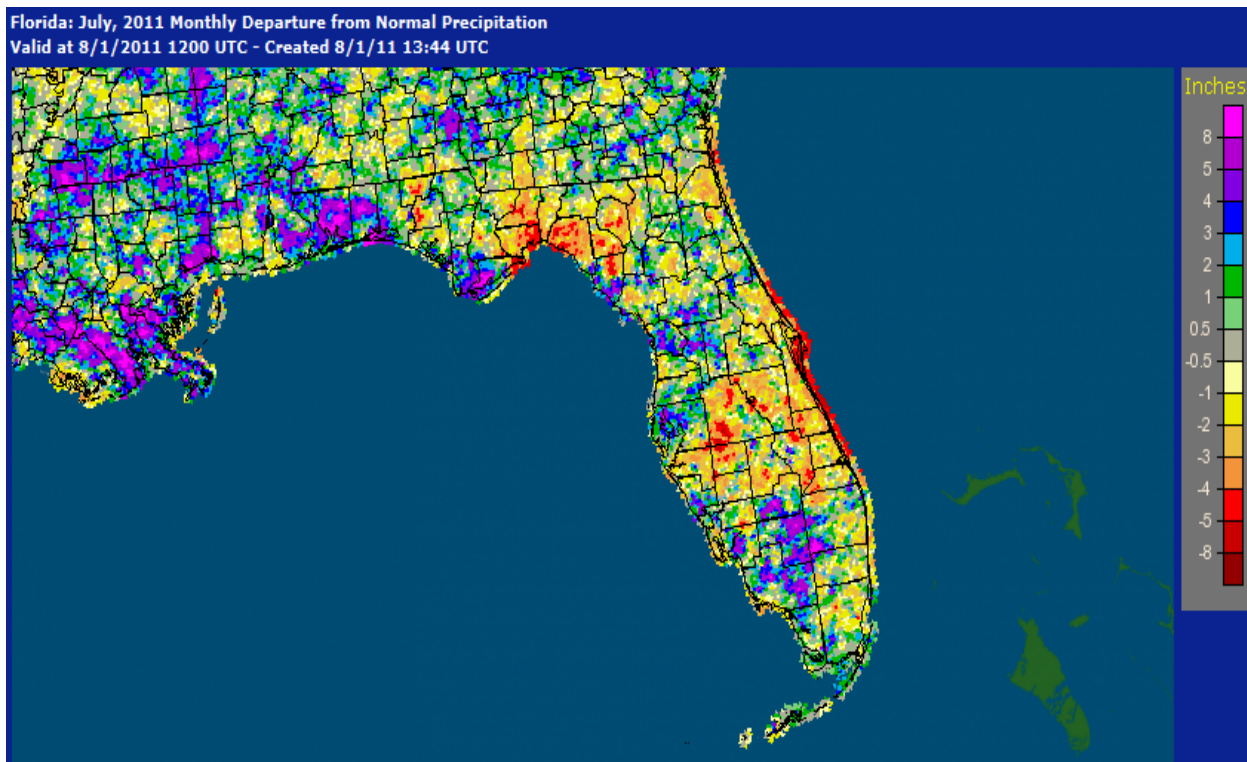


FIGURE 1: JULY PRECIPITATION DEPARTURE FROM NORMAL IN INCHES. YELLOW, ORANGE AND RED AREAS DEPICT BELOW NORMAL PRECIPITATION OVER PORTIONS OF SOUTHEAST FLORIDA, WHILE BLUE AND MAGENTA COLORS DEPICT ABOVE NORMAL PRECIPITATION OVER INLAND AND WESTERN SECTIONS OF SOUTH FLORIDA.

Despite these July rainfall amounts, most areas are still running rainfall deficits compared to normal this rainy season. Since June 1, the only areas which have observed above normal rainfall have been over the Everglades and Big Cypress Preserve, extending up to the southwest shore of Lake Okeechobee. Most other areas, including the metropolitan areas along both the east and west coasts, remain below normal since June 1.

DROUGHT IMPACTS

Although July rains alleviated drought conditions area-wide, most of southern Florida remains in a drought. Drought levels range from D0 (abnormally dry but no drought) in western sections of southern Florida to D2 (severe drought) over the eastern half of the peninsula, except for a small area of D3 (extreme drought) over coastal and metro sections of central and southern Palm Beach County, coastal and metro Broward County and coastal and metro sections of northeastern Miami-Dade County (Figure 2). Lake Okeechobee has also responded to the July rainfall with the level of the lake increasing to over 10 feet from its late June low of almost 9.5 feet (Figure 3).

Due to the large rainfall deficits which remain over many parts of south Florida and lower than normal underground water levels, drought impact will likely continue at least through August.

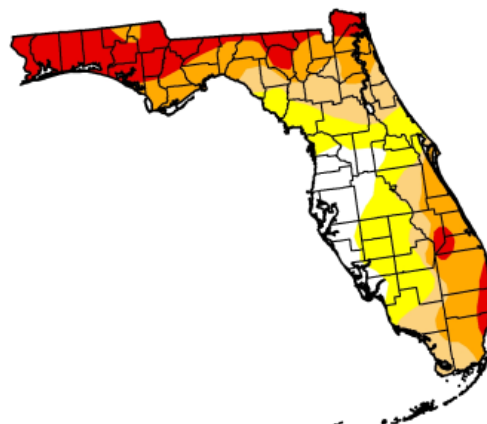
U.S. Drought Monitor

Florida

July 26, 2011

Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	11.34	88.66	65.92	47.37	20.91	0.00
Last Week (07/19/2011 map)	10.14	89.86	66.82	48.87	22.12	0.00
3 Months Ago (04/26/2011 map)	8.72	91.28	76.21	41.19	15.63	0.00
Start of Calendar Year (12/28/2010 map)	0.18	99.82	86.04	50.84	20.21	0.00
Start of Water Year (09/28/2010 map)	54.97	45.03	18.02	4.22	0.00	0.00
One Year Ago (07/20/2010 map)	92.52	7.48	0.00	0.00	0.00	0.00



Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, July 28, 2011
Brad Rippey, U.S. Department of Agriculture

FIGURE 2: DROUGHT MONITOR AS OF JULY 26TH.

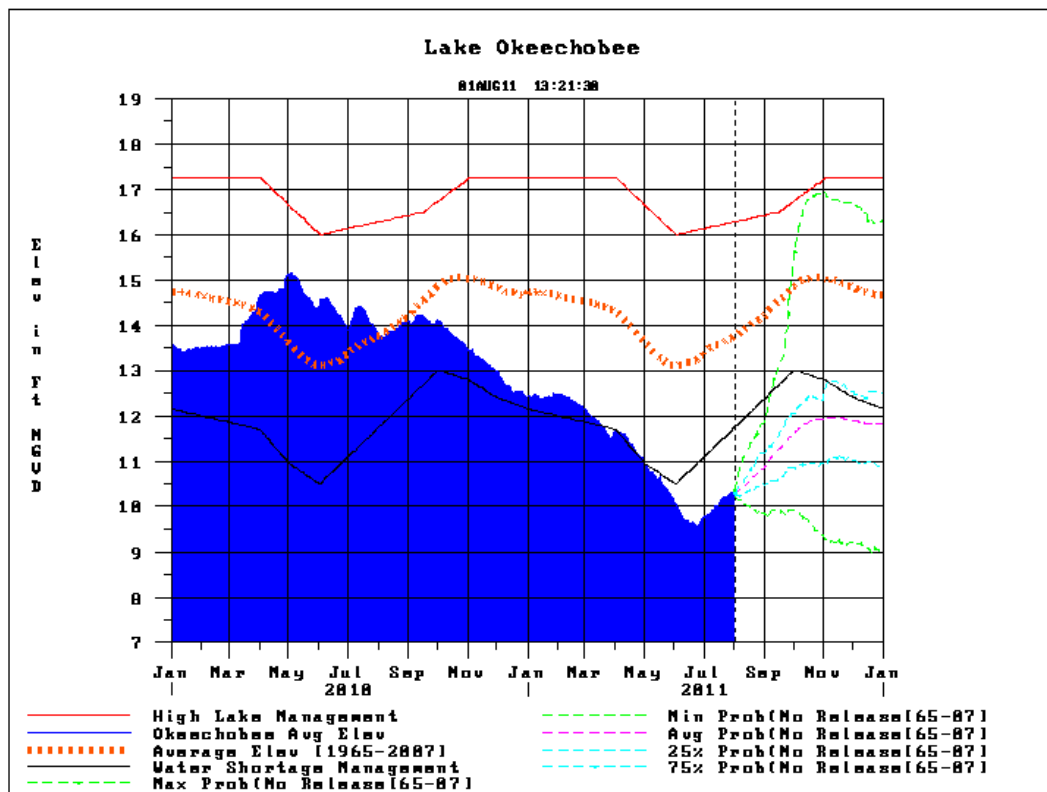


FIGURE 3: LAKE OKEECHOBEE LEVEL FROM JANUARY 2010 THROUGH AUGUST 1, 2011.

TEMPERATURES

A prevailing east wind flow and lack of large-scale rain producing weather systems led to another hot month over south Florida. Temperatures ranged from 1 to 3 degrees above normal for the month, and of particular note was the extended period of very warm overnight minimum temperatures over the southeast Florida metro area. This was the primary contributor to West Palm Beach establishing an all-time hottest July on record.

- **West Palm Beach** recorded an average July temperature of 85.7 degrees. This is 3.2 degrees above normal and **is the hottest July on record**. Record warm minimum temperature records were established on 9 consecutive days and the total of 10 consecutive days of minimums at or above 80 degrees also sets a new record for number of consecutive days of low temperatures remaining at or above 80 degrees. The highest temperature recorded for the month was 96 degrees on the 21st, 22nd and 23rd.

- **Miami** recorded an average June temperature of 84.7 degrees. This is 1.0 degrees above normal and is the 8th hottest July on record. The highest temperature recorded for the month was 97 degrees on July 17th.

- **Naples** recorded an average July temperature of 83.3 degrees. This is 1.3 degrees above normal and ties for the 12th hottest July on record. The highest temperature recorded for the month was 97 degrees on the 28th.

- **Fort Lauderdale** recorded an average July temperature of 84.2 degrees. This is 1.6 degrees above normal and ties the 4th hottest July on record. The highest temperature recorded for the month was 97 degrees on the 17th.

OUTLOOK AND HAZARDS

Long-range outlooks by the [Climate Prediction Center](#) for the period from August to October call for an increased likelihood of above normal precipitation as well as above normal temperatures. The outlook of wetter than normal conditions in the August-October period is consistent with the outlooks issued as early as May and is largely based on similar trends observed over the past several years. The outlook of warmer than normal temperatures from August to October is also based on trends as well as contributions from warmer than normal ocean temperatures and relatively dry soil conditions. It must be emphasized, however, that long-range outlooks are **subject to large errors**.

August marks the beginning of the busiest part of hurricane season. South Florida has been directly hit by a total of 11 hurricanes in August going back to the late 1800s. Only October and September have had more hurricane strikes. Therefore, NOW is the time to make sure personal and business hurricane plans are in place and that you and your families are ready this hurricane season. Go to [ready.gov](#) for information and preparedness checklists.

August and September are also prime months for [rip currents](#). Always swim near a lifeguard and heed the advice of Ocean Rescue personnel. Pay attention to flags posted at lifeguard stands which alert of the potential rip current danger.

For daily weather forecasts, watches, warnings and statements, please visit our web site at weather.gov/southflorida. Also, please make sure to visit our Facebook page by [clicking on this link](#).